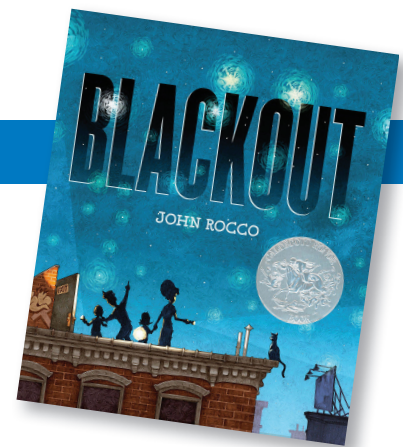


Blackout

RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMED: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH



SCIENCE, TECHNOLOGY, ENGINEERING DIY FLASHLIGHT

Materials: 2 D batteries, 2 plastic-coated copper wires cut into 5" lengths with ends exposed, toilet paper tube, 3 volt lightbulb, 2 brass fasteners, paper clip, electrical tape, small paper cup with bottom cut out

1. Tape batteries together (+ to -) end to end.

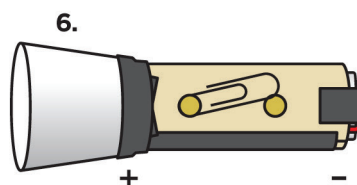
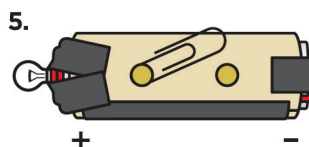
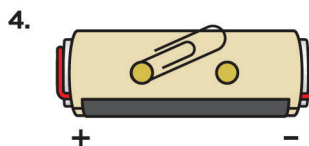
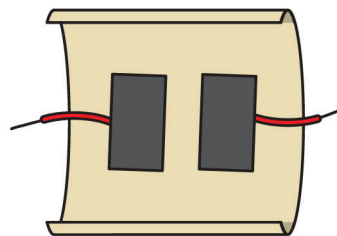
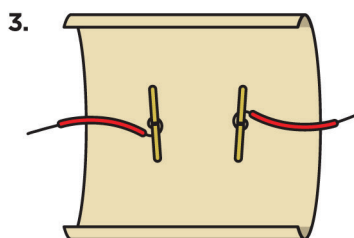
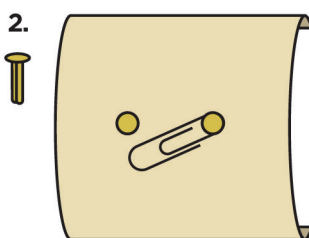
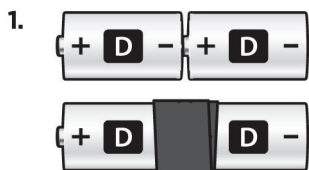
2. Cut toilet paper tube open. Punch brass fasteners through tube—with one holding the paper clip in place. Paper clip should be able to rotate and touch other fastener.

3. Inside tube, wrap each copper wire end around a fastener and open up fasteners to secure against paper tube. Tape down. Note: please allow more exposed wire on the front (+) end of the flashlight.

4. Tape tube back together. Slide batteries into tube. Each remaining wire end should touch each remaining battery end.

5. Using the extra exposed wire on the front (+) end of the flashlight, wrap it around the base of the 3 volt lightbulb and tape all down securely against the battery. Tape wire down against back end of flashlight.

6. Tape small paper cup over lightbulb. When paper clip connects the 2 brass fasteners, you should have a flashlight!



TECHNOLOGY LIGHTS OUT!

Have each student or pairs of students brainstorm what they would need if the power went out. List the items they need for survival and/or entertainment. Have them create a wordle with their list at <http://www.edwordle.net/>. When finished, wordles can be shared with the class.

ART, WRITING BLACKOUT POETRY

Materials: newspapers, old reading sheets, magazines, black markers

Visit: <https://faithfulteaching.com/education/blackout-poetry-examples-ideas/> to learn how to do blackout poetry. Using a black marker, kids keep covering up words on newspaper, reading sheets, or a magazine page until the only words left are the ones they want to keep. Definitely adaptable for upper grades!

ART A STARRY NIGHT

Have students view van Gogh's *Starry Night* at www.vangoghgallery.com/painting/starry-night.html. Let the class compare the famous painting and the center layout illustrations by John Rocco. Have students create their own star-filled night scenes.

MATH TEMPUS FUGIT — OR TIME FLIES!

Ask students to figure out how much time elapsed during the blackout in the story. Have them estimate the amount of time the family took to do each of the activities described in the book. What questions arise as they are making their calculations? Does the time frame of the story seem possible? Explain.